

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A mixing apparatus for mixing livestock feed, said apparatus comprising[[:]]:

a container for the reception of feed; said container including[[:]],

a floor,

a wall extending away from said floor such that substantially all of said wall is disposed above said floor, said wall defining a top opening disposed remote from said floor for the reception therethrough of the feed, the arrangement being such that said floor and said wall define therebetween an enclosure for the feed received through the top opening[[:]].

at least one auger disposed within said enclosure having an upper core and a lower core, said lower core having an axis of rotation extending substantially perpendicular to a plane of the floor,

said upper core including a centerline positioned longitudinally and centered in said upper core,

said centerline of said upper core being non-concentric with said axis of rotation.

Claim 2 (Original): The mixing apparatus of claim 1 wherein said centerline of said upper core is disposed at an angle to said axis of rotation.

Claim 3 (Original): The mixing apparatus of claim 2 wherein the angle of said upper core is adjustable, so that varying degrees of non-concentricity can be achieved.

Claim 4 (Original): The mixing apparatus of claim 3 wherein said upper core angle is adjustable using a plate type shim.

Claim 5 (Original): The mixing apparatus of claim 2 wherein the angle of said upper core comprises a range of 1 to 30 degrees.

Claim 6 (Original): The mixing apparatus of claim 5 wherein the range comprises 5 to 15 degrees.

Claim 7 (Original): The mixing apparatus of claim 1 wherein said centerline of said upper core is parallel and offset from said axis of rotation.

Claim 8-19 (Canceled):

Claim 20 (New): The mixing apparatus of claim 1, further comprising a paddle connected to said lower core.

Claim 21 (New): The mixing apparatus of claim 1, further comprising a lower fighting segment on said lower core and an upper fighting segment on said upper core.

Claim 22 (New): The mixing apparatus of claim 21, wherein said lower fighting segment and said upper fighting segment together have a conical shape.

Claim 23 (New): The mixing apparatus of claim 1, wherein a distance between an outer edge of flighting on said lower core and said axis of rotation is greater than a distance between an outer edge of flighting on said upper core and said centerline.

Claim 24 (New): The mixing apparatus of claim 1, wherein said auger further comprises a knife connected to flighting of at least one of said lower core and upper core.

Claim 25 (New): The mixing apparatus of claim 24, wherein said knife has a cutting edge pointing toward a direction of rotation of said auger.

Claim 26 (New): The mixing apparatus of claim 1, wherein said upper core is configured to be removably mounted to said lower core.

Claim 27 (New): The mixing apparatus of claim 26, wherein, when said upper core is mounted on said lower core, said centerline is perpendicular to said floor.

Claim 28 (New): The mixing apparatus of claim 1, further comprising a core mounting plate shim disposed between said upper core and said lower core, wherein said core mounting plate shim is configured such that said centerline is at an angle not perpendicular to said floor.

Claim 29 (New): The mixing apparatus of claim 28, wherein said core mounting plate shim is configured such that said angle depends on a coupling position of said core mounting plate shim relative to mounting plates of said cores.

Claim 30 (New): The mixing apparatus of claim 1, wherein said centerline is tilted at an angle with said floor other than 90 degrees.

Claim 31 (New): The mixing apparatus of claim 1, wherein an angle between said centerline and said axis of rotation varies according to a coupling position of a mounting plate of said upper core relative to a mounting plate of said lower core.

Claim 32 (New): The mixing apparatus of claim 1, wherein a diameter of said lower core is greater than a diameter of said upper core.